normal and are now excreted rapidly. Not only does edema save the kidney from excreting too highly toxic fluids, but as antibodies are present in all transudates, the toxins are catabolized in the tissues and so rendered innocuous. Probably the pathogenesis of edema is the same in nephritis. Nephritis is largely due to a hematogenic infection. Frequently the fact is overlooked that the causative agent persists even if the kidney lesion makes no progress. Here the organism protects itself from the assault by edema in hydropic nephritis and by polyuria in the anhydropic. Clinically, in the hydropic form, it has been observed that a disappearance of edema has been followed by an exacerbation of the symptoms caused originally by the toxins, a fact that can be explained only by supposing the elimination of a too highly concentrated urine. But while Widal and Javal believe the edema of nephritis to be due to a primary retention of chlorides through kidney impermeability, Débove thinks it a primary retention of toxins. The blood and lymph contain the same amounts of chlorides before, during, and after nephritis, and it is highly probable that water and salts are retained to make the toxins dilute enough, also isotonic. When salt is excluded from the diet the edema is reabsorbed and gradually excreted. Sodium chloride is one of the simplest things for the kidney to excrete in health. In disease this power is somewhat impaired, but by no means so much as is the power of urea excretion. He thinks of flooding the kidney with a highly toxic urine. In this toxicity there is no reason to believe that sodium chloride plays any important part. In the interstitial form the organism tries to secure elimination by polyuria because the toxins are different and have acted upon different kidney structures. While many types of edema are mechanical in origin, we cannot afford to overlook the primary chemical change in the blood as is found in cirrhosis of the liver.

Functional Diagnosis of the Liver.—F. FALK AND P. SAXL (*Zeit. f. klin. Med.*, 1911, lxxiii, 131) point to the fact that while amino-acids have frequently been found in the urine in large quantity in hepatic disease, practically no attention has been paid to the occurrence of the more complex nitrogenous bodies (polypeptids). The authors, therefore, undertook a study of the amount of amino-acid nitrogen and of peptid nitrogen in cases of primary liver disease and also in cases where the liver was affected secondarily. To determine the peptid N, they used the formalin titration method of Sörensen. As Falk and Saxl have previously shown, this method, as modified slightly by them, gives results which, though not absolute, are sufficiently accurate for clinical purposes. The studies of Falk and Saxl show that hepatic disease in general causes an increase in the relative quantity of both the amino-acid and the peptid N. Ordinarily the two are increased proportionally, but exceptions to this are quite frequent. After feeding glycocoll, they find no changes in the nitrogenous fractions in patients with normal livers; with hepatic disease, and particularly cirrhosis, they observed a great increase in the peptid N fraction.

The Blood Findings in Epidemic Cerebrospinal Meningitis.—RUSCA (*Deut. Archiv f. klin. Med.*, 1911, ciii, 235) has made a rather complete study of the blood in nine cases of epidemic cerebrospinal meningitis, of which six were fatal. At the beginning of the disease there is a leukocytosis, due mainly to an increase in the number of the polynuclear neutrophilic cells; the lymphocytes may be slightly increased or decreased. During the course of the disease, there occurs with each aggravation of the symptoms both a relative and an absolute increase of the polynuclear neutrophiles. During the decline of the acute symptoms there is a corresponding drop in the relative and absolute number of these cells. Thus, if one plots the lymphocyte and polynuclear neutrophile curves, it is found that they diverge with a recrudescence and tend to become approximated during recovery. In the cured cases, Rusca found a crossing of the polynuclear neutrophilic and lymphocytic curves, the lymphocytes becoming more numerous. Following a simple lumbar puncture, the author observed a fall in the leukocyte count. This fact should be remembered in those cases treated with serum, lest a similar occurrence should be attributed to the serum. In 2 of the cases which recovered, the eosinophiles were greatly increased, both absolutely and relatively. Mastzellen were lacking in all the fatal cases shortly before death. In 4 of his cases the author saw the meningococcus in the stained blood film, and in one of these a blood culture made immediately after studying the film yielded a positive culture.

Colloidal Nitrogen in the Urine in Cancer.—S. Mancini (*Deut. Archir f. klin. Med.*, 1911, ciii, 288) has examined the urine for colloidal nitrogen according to the method of Salkowski. The twenty-four-hour specimen was always used. When alkaline in reaction, the urine was acidified slightly with acetic acid. Albumin, when present, was removed before examining for the colloidal nitrogen. The percentage of colloidal nitrogen in normal urine, taking the total nitrogen as 100 per cent., is about 3.56, according to Salkowski. Mancini found an increase of the colloidal nitrogen in cancer, the average being 6.48 per cent. of total N. He finds, however, that this increase is not specific for the urine in cancer, since a similar result may be encountered in pneumonia and pleurisy as well. Indeed, there may be an increase in all those diseases in which there is a continuous absorption of exudates or transudates, such as pneumonia, pleurisy, anasarca from whatever cause, cirrhosis of the liver, and purulent processes. An abnormally large proportion of colloidal nitrogen is, therefore, not diagnostic of cancer, but it may be of great aid in arriving at the correct diagnosis.

Irregularity of Feeding and its Effect on the Stomach.—Külbs (*Ztschr. f. klin. Med.*, 1911, lxxiii, 47) studied experimentally the effects of irregularity in feeding and also the time intervals between feedings which may be endured without loss in weight. The experiments were all carried out upon cats, and Külbs believes his findings may have some bearing on human pathology. The results he obtained are as follows: (1) If one gives a cat as much meat daily as it cares for, the animal soon regulates the quantity consumed, avoiding an excess. (2) Animals fed every second, third, or fourth day eat rather less that two-, three-, or fourfold the quantity of a daily ration. They do not lose weight, however, so long as they are fed regularly. (3) Slight irregularities in the time of feeding cause no disturbances. (4)

If the feeding hours are very irregular, death frequently follows with rapid loss in body weight. There is found a greatly dilated stomach or, less often, a subacute gastro-enteritis. (5) Occasionally, when the animals are fed regularly at long intervals, they die with atony of the stomach and rapid emaciation. (6) These observations may, perhaps, be correlated with the fact observed in man that the human stomach is frequently upset when the meals are taken at very irregular intervals.

The Diagnostic Value of Diastase in the Urine. — E. MARINO (*Deut. Archiv f. klin. Med.*, 1911, ciii, 326) reports a quantitative study of urinary diastase in various diseases. He used the method of Wohlgemuth. The author finds (1) that the excretion of diastase in the urine is greatly lessened in nephritis and in diabetes mellitus. (3) In pancreatic disease the urinary diastase is increased in quantity. This, the author believes, is a very important sign of pancreatic disease. (3) As a functional test of the kidney, the quantitative estimation of diastase is valuable. (4) In pernicious anemia and in secondary anemia the diastase of the urine is markedly decreased. The diminution seems to be greater in pernicious than in secondary anemia, though the number of cases studied was too small to formulate a rule.

The Rate of Regeneration of Blood Platelets.—W. W. DUKE (*Jour. Exper. Med.*, 1911, xiv, 265) has been able to render the blood of dogs practically free of platelets by withdrawing 200 to 300 c.c. of blood from the carotid artery, defibrinating it completely, and then reinjecting it intravenously. A repetition of this procedure six to ten times reduces the number of platelets to a minimum. He finds that animals thus deprived of the greater part of their fibrinogen and platelets display a marked tendency to bleed. After the practical removal of platelets from the blood, their regeneration is very rapid, amounting to about one-fifth of the normal number daily. From observations on human beings, Duke believes that the life cycle of the platelets is a matter of only a few days.

The Production, Life, and Death of Crescents in Malignant Tertian Malaria.—D. THOMSON (*Annals Trop. Med. and Parasitol.*, 1911, v, 57) has studied the production, life, and death of crescents in treated and untreated cases of malignant tertian malaria by means of an enumerative method, the details of which are to be given in a forthcoming report. His results are summarized as follows: (1) Crescents are produced from the ordinary asexual spores of *P. falciparum*, due to a development of immunity toward the latter. (2) They develop somewhere in the internal organs and then appear suddenly in the peripheral blood. (3) The period required for their development is about ten days. (4) Crescents do not generally live more than a few days in the peripheral blood. (5) Crescents may be present in the peripheral blood during periods as long as eight weeks, not because the individual crescents survive for that time, but because their numbers are constantly replenished from surviving asexual forms. (6) Fresh broods of crescents come into the circulating blood daily, or every other day, or irregularly, according as the asexual sporulations occurring ten days before were quotidian, tertian, or irregular. (7) Quinine